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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/788,801	02/27/2004	Scott Musson	ORACL-01382US0	7864
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Fliesler Meyer LLP 650 California Street 14th Floor San Francisco, CA 94108			EXAMINER HASSAN, RASHEDUL	
			ART UNIT 2179	PAPER NUMBER
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/788,801

**Applicant(s)**

MUSSON ET AL.

**Examiner**

RASHEDUL HASSAN

**Art Unit**

2179

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 13 January 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,3-16, 18-30, 32-44 and 46-49 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3-16, 18-30, 32-44 and 46-49 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 1/13/09, 2/6/09, 4/6/09
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date: \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

**Claims 1, 3-16, 18-30, 32-44, and 46-49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anuff et al. (US 6,327,628 B1) hereinafter Anuff, in view of Hough et al. (US 2002/0118226 A1) hereinafter Hough.**

For claims 1, 16, and 30, Anuff anticipates a computer implemented ***method for responding to a request*** (an example of a request is disclosed in [0039] of the instant

specification to be "an HTML request originating from a web browser".

Anuff teaches this limitation. See c3:13-22, c6:57-65, also c14:32-36), **comprising:**

***accepting the request;*** (e.g., accepting a request from a browser in a client device 10 sent to a server device 12. See Fig. 1, c3:1-24).

***generating a control tree based on the request;*** (the "control tree" is interpreted to mean relevant instantiated class objects implementing the requested GUI together with their interrelationships with each other as illustrated in Fig. 4 in Anuff).

***mapping the request to the control tree wherein the control tree is a logical representation of a graphical user interface (GUI), wherein the control tree includes a set of controls which represent corresponding graphical and functional elements in web applications and are related hierarchically to one another, wherein the set of controls includes a plurality of portlets wherein each of the plurality of portlets is a self-contained application implemented on one or more web servers that renders its own GUI;*** (The claim requires mapping the request to the control tree. First let us consider what is meant by "the control tree". The claim defines a "control tree" as "a logical representation of a graphical user interface (GUI)". According to the instant disclosure, "controls" represent "corresponding graphical and functional elements in web applications ... In one embodiment, a control can be implemented as one or more classes in an object oriented programming paradigm". Emphasis added, see [0028]. Therefore, "a control" is a "class" (in object oriented programming paradigm, hereinafter referred to as OOP) which is a logical representation of a corresponding graphical and functional

element in a web application. In other words, the "control tree" is a collection of classes associated with a GUI since these classes can be seen as a logical representation of the GUI. Similarly, "mapping the request to a control tree" can reasonably be interpreted to mean, identifying the entire relevant instantiated classes/objects implementing the requested GUI. Anuff inherently teaches identifying the entire relevant instantiated classes/objects implementing the requested GUI. He further teaches, with regard to Fig. 4, that these back end controls/objects are related hierarchically to one another, e.g., A owns B and A is a subclass of B. Thus Anuff teaches mapping the request to a control tree wherein the control tree includes a set of controls which are related hierarchically to one another. He also teaches, or at least makes it obvious that *the set of controls includes a plurality of portlets wherein each of the plurality of portlets is a self-contained application implemented on one or more web servers that renders its own GUI* since the "modules" of his invention reads on this limitation. See Module 29 in Fig. 4, c6:21-32, and modules 26 in Fig. 2);

***advancing the control tree through at least one lifecycle stage based on the request, wherein the set of controls in the control tree operates to interact with each other and produce response based on the request in the at least one lifecycle stage;*** (For a control, the lifecycle is defined in the instant disclosure, by a set of methods representing stages in the lifecycle. Life cycle stages are illustrated in Table 3 and appear to be nothing more than various stages of an object, instantiated from a class in the context of OOP, during runtime. Therefore, Anuff's controls for generating a portal GUI, implemented using objects in OOP, inherently advances the objects

implementing the GUI through at least one lifecycle stage, e.g., at least the "Init" stage that allows a control to perform initialization based on interaction with each other in order to produce the response, i.e., the GUI, based on the request).

***providing the request to a portlet container that contains the at least one portlet;*** (Anuff teaches server processes 12a-12n that serve as portlet containers. See Fig. 1, c3:58-65.) ***and***

***aggregating the output of each of the at least one portlets and providing the output to the GUI;*** (In this context, "*providing the output to the GUI*", is interpreted to mean rendering the output on the display device. Anuff clearly teaches this limitation as shown in Fig. 2).

Anuff however fails to explicitly teach that ***each of the plurality of portlets is capable of communicating with another portlet of the plurality of portlets*** as claimed. However, the Examiner notes that the modules (i.e., portlets) in Anuff can be designed or implemented to perform any type of functionalities commonly known to a person of ordinary skill in the art at the time of the invention was made. In the same field of invention, Hough teaches a digital dashboard as a framework to build and deploy personalized portals that aggregate personal, team, corporate, and external information and services with single-click access to business intelligence and knowledge management functionality (See [0057]. Hough teaches arranging portlets (i.e., referred in the reference as "Web Parts" or "Regions") in the dashboard style portal interface wherein the portlets are capable of communicating with each other in order to provide related information within the portlets based on user input (see Abstract, Summary and

Select and Flag User Interface Mechanism as disclosed in [0044] to [0069]). Therefore, it would have been obvious to a person of ordinary skill in the art having the teaching of both Anuff and Hough before him/her at the time of the invention to implement a portal application including a plurality of portlets wherein each of the plurality of portlets is capable of communicating with another portlet of the plurality of portlets as claimed, since such a combination is not the result of novelty but of ordinary skill and common sense. Additionally, as Hough mentions, the motivation for implementing communications within the plurality of portlets according to his invention would have been desirable to provide a system in which a user can easily join and filter information, to influence the relationship of information in different portlets of a portal application in a computer system (see Hough, [0014]).

For claim 46, Anuff teaches a computer implemented ***method for rendering a graphical user interface (GUI)*** (see the GUI in Fig. 2), ***comprising:***

***accepting a request;*** (e.g., accepting a request from a browser in a client device 10 sent to a server device 12. See Fig. 1, c3:1-24.)

***mapping a request to a control tree factory;*** (e.g., mapping the request for content from a browser in a client device 10 to the appropriate server 12 hosting the content. See Fig. 1, c3:58-65.)

***generating a control tree from the control tree factory;*** (e.g., generating the entire relevant instantiated classes/objects implementing the requested GUI together with their interrelationships with each other at the server.)

***evaluating the control tree based on the request;*** (e.g., performing respective processing of relevant classes based on the request, inherent in the reference.) ***and providing a response,*** (e.g., GUI contents as illustrated in Fig. 2 are provided by the servers 12 as response to the request for content from browser in client device 10.) ***wherein a control within the control tree represents a corresponding graphical and functional element in a web application and operates to process the request, interact with each other and produce a response.*** (e.g., the entire relevant instantiated classes/objects implementing the requested GUI represent a control tree, such as one illustrated in Fig. 4. Anuff teaches throughout the reference how various controls operate with each other in order to process the request and provide the response for the request. See sections such as 3.1 Components, 3.2 Managers and Services, 3.3 Modules etc.), ***wherein the control tree includes a plurality of portlets wherein each of the plurality of portlets is a self-contained application implemented on one or more web servers that renders its own GUI*** (e.g., the “modules” of his invention reads on this limitation. See Module 29 in Fig. 4, c6:21-32, and modules 26 in Fig. 2).

Anuff fails to explicitly teach that ***each of the plurality of portlets is capable of communicating with another portlet of the plurality of portlets*** as claimed. However, it has been already discussed in the rejection of claim 1 hereinabove that this limitation would have been obvious to one of ordinary skill in the art over Anuff in view of Hough reference (see the rejection of claim 1 hereinabove for the rationale).



For claim 3 and 32, Anuff further anticipates ***generating a response wherein the response can be used to render at least a portion of the GUI.*** (Since the response from servers 12a-12n are used to display modules 26 in portal front page. These modules are objects that encapsulate a specific, bounded portion of the GUI, and allow that portion to be administered as a unit. For example, a module might display news, sports scores, stock quotes, or weather forecasts. See c3:2-24 and c6:22-31.)

For claim 4, 18 and 33, Anuff further anticipates ***wherein the step of generating a control tree comprises: creating a metadata representation of a control tree; and generating a class to construct the control tree based on the metadata representation.*** (See c6:34-46.)

For claim 5, 19 and 34, Anuff further anticipates ***wherein the request is a hypertext transfer protocol request (HTTP);*** (See c6:57-58) ***and the request originates from a web browser.*** (See 16 in Fig. 1.)

For claim 6, 20 and 35, Anuff further anticipates ***providing the response to a web browser.*** (See Fig. 1, Fig. 2, c13:53-55)

For claim 7, 21, 36, and 47, Anuff further anticipates ***wherein the control tree is advanced through the at least one lifecycle stage by an interchangeable lifecycle component.*** (Regarding an "interchangeable lifecycle component" the disclosure mentions, in regard to Fig. 8, "The control container can use an interchangeable lifecycle driver 804 to drive the control tree through a sequence of states so that the request can be processed. As with the interchangeable persistence driver, an interface is provided to isolate lifecycle driver implementation details from the control container. This allows for different lifecycle implementations to be interchanged as needed". As for what constitutes the "interchangeable lifecycle driver/component", a reasonable interpretation would be, in absence of any explicit definition of the term in the disclosure and without importing limitations from the disclosure into the claim, to be objects/processes arbitrarily combined or divided into separate software, firmware or hardware components responsible to instantiate and carry out the run-time processing of the relevant classes/objects implementing the requested GUI which is inherent in Anuff.)

For claim 8, 22 and 37, Anuff further anticipates ***wherein each one of the set of controls can have an interchangeable persistence mechanism.*** (Anuff teaches object persistence using suitable database interface. See c4:16:32 and c5:45-48.)

For claim 9, 23 and 38, Anuff further anticipates ***wherein each one of the set of controls can render itself according to a theme.*** (See c8: 22-49.)

For claim 10, 24 and 39, Anuff further anticipates ***wherein each one of the set of controls can interact with another one of the set of controls;*** (See c4: 60-61.)

For claim 11, 25 and 40, Anuff further anticipates ***wherein one of the set of controls can advance through the series of at least one lifecycle stage in parallel with another of the controls.*** (Since in OOP, objects can be instantiated in parallel and individually carry on their run-time processing in parallel with another object. Anuff also teaches multithreaded module preparation, c14:31-41.)

For claim 12, 26 and 41, Anuff further teaches ***wherein a lifecycle stage is one of: init, load state, create child controls, load, raise events, pre-render, render, save state, unload and dispose.*** (Implicitly taught since objects apparently follow these stages in OOP which is well known to a person of ordinary skill in the art.)

For claim 13, 27 and 42, Anuff further anticipates ***wherein the response is an hypertext transfer protocol (HTTP) response.*** (See c6:61-65.)

For claim 15, 29 and 44, Anuff further anticipates ***wherein each one of the set of controls can be one of: Book, Page*** (see c4:65), ***Window, Menu, Layout*** (see c4:66), ***Portlet*** (modules, c4:65), ***Theme, Placeholder, Shell, LookAndFeel, Desktop, Body, Footer, Header, Head, Titlebar, ToggleButton, TreeView, TreeViewWithRadioButtons.***

For claim 48, Anuff further teaches ***a “wire-up” service is used in the control tree factory that cause the control tree factory to return a root of a control tree.*** (E.g., a network connectivity component of a server 12 can be interpreted as a “wire-up” service in the server 12 which is necessarily used to provide the root, i.e., the topmost building block of a requested portal page which could be the portal front page.)

For claim 49, Anuff further teaches ***associating a context with a root of the control tree.*** (E.g., Fig. 4 illustrates associating a “PortalPageContext” which is associated with the Portal Front page.)

For claim 14, 28, and 43, Anuff does not explicitly teach that controls can raise events and respond to events. However, he explicitly teaches that an object model comprises a collection of objects that work together in documented relationships. Official notice was taken in the previous office actions that in object oriented programming communication/co-operation between objects using events was well known in the art at the time of the invention. Therefore, if not already implicitly taught by Anuff, it would have been obvious to a person of ordinary skill in the art to modify his invention so that controls can raise events and respond to events. The motivation for such modification would have been necessitated by the very nature of the GUI (portal) which is an interactive application and it is well known to a person of ordinary skill in the art that such applications are well suited for an event-driven implementation. Applicants have not challenged the Official Notice in the Reply and therefore appear to have conceded that such was prior art knowledge.

### ***Response to Arguments***

Applicant's arguments with respect to claims 1, 3-16, 18-30, 32-44, and 46-49 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to RASHEDUL HASSAN whose telephone number is (571)272-9481. The examiner can normally be reached on M-F 7:30AM - 4PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Weilun Lo can be reached on 571-272-4847. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic

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Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Rashedul Hassan/  
Examiner, Art Unit 2179

/Wellun Lo/

**Supervisory Patent Examiner, Art Unit 2179**